least for decoding the encoded binary digital signals. Briefly, in accordance with yet another embodiment of the invention, an integrated circuit includes: a switch adapted to receive a packet of binary digital signals, the packet of binary digital signals including encoded binary digital signals specifying a route through a network without decoding. Briefly, in accordance with yet one more embodiment of the invention, an integrated circuit includes: a route unit adapted to produce binary digital signals to be included in a packet of binary digital signals that after encoding specify a route through a network without decoding.

REMARKS

The above-referenced patent application has been reviewed in the light of the Office Action, dated March 24, 1998, in which: claims 1-27 are rejected under 35 USC Section 103; and FIG. 3 has been objected to because it should be designated by a legend, such as –Prior Art--. The Examiner has also requested that the abstract not exceed 250 words and be placed in proper form; and requested that the related U.S. patent application cited on page 2 of the specification include its serial number. Reconsideration of the above-referenced patent application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-27 are now pending the above-referenced patent application. No claims have been cancelled, added or amended.

The Examiner has objected to FIG. 3 indicating that it should be designated by a legend such as – Prior Art --. Applicants have submitted with this amendment a new FIG. 3 in which this legend has been added in red. It is respectfully requested that the Examiner approve this new FIG. 3. If the Examiner approves this new FIG. 3, it is, likewise, requested that the objection to FIG. 3 be withdrawn. The Examiner has also requested that the abstract not exceed 250 words and be placed in proper form. The foregoing amendment includes a replacement abstract. It is respectfully requested that the Examiner indicate this new abstract complies with his request. The Examiner has also requested that the serial number of the related U.S. patent application cited on page 2 of the specification be provided.

The foregoing amendment provides the serial number. Again, it is respectfully requested that the Examiner indicate that his request has been met.

The Examiner has rejected claims 1 to 27 under 35 USC Section 103 for a variety of reasons. The Examiner has indicated that: claims 1 to 6 are rejected as being unpatentable over Applicants' admitted prior art of FIG. 3 in view of Huang et. al.; claims 1 to 16 are rejected as being unpatentable over Jugg et. al. in view of Huang et. al.; and claims 17 to 27 are rejected as being unpatentable over May et. al. in view of Huang et. al. This rejection by the Examiner as to these claims is respectfully traversed. We address each of these rejections in turn below.

As previously indicated, the Examiner has rejected claims 1 to 16 as being unpatentable over Applicants' admitted prior art of FIG. 3 in view of Huang. As previously indicated, this rejection by the Examiner is traversed.

Specifically, in his remarks, the Examiner states "Applicant's (sic) admitted prior art of figure 3 shows the receiving at a switch of a packet of binary digital signal (sic) including encoded binary digital signals used to route the packet through a network." In this respect, the Examiner is incorrect. As the terms "encoded binary digital signals used to route the packet through the network" are used in the specification and in the claims of the above-referenced patent application, FIG. 3 does not show what the Examiner has asserted it shows.

This language is used, for example, on page 10 of the specification, lines 3 to 14. It states:

> In one embodiment of a method for routing encoded signals through the network in accordance with the invention, the packet including a portion of the header may be received at a switch, such as switch 140 in FIG. 1, and the portion of the header may include encoded binary digital signals specifying a route through the network without decoding the header portion. More specifically, rather than decoding bits in the portion of the header that provides the switch information on how to route a packet to a destination port or address and then re-encoding those bits, instead a bit pattern is chose so that when the bit pattern is encoded it directly provides information regarding routing the packet through the network in its encoded form. Therefore, the encoded binary digital signals specify a route through the network without decoding This may be accomplished using a look-up table in a route unit or router, for example, although the invention is not limited in scope in this respect. In this context, the terms route unit and router are used interchangeably.

The portion of the specification excerpted above, specifically page 10, makes it clear that the Examiner has incorrectly applied the language of the claims to FIG. 3 of the specification. Although many other arguments could be made to indicate that the Examiner's rejection of the claims based on the combination of FIG. 3 and Huang could be made, it is respectfully asserted that the previous remarks are sufficient to overcome the Examiner's rejection. Therefore, it is respectfully requested that the Examiners' rejection of these claims on this basis be withdrawn.

As previously indicated, the Examiner has also rejected claims 1 to 16 as being unpatentable over Judd in view of Huang. Again, this rejection by the Examiner is respectfully traversed.

The Examiner specifically states, "Judd teaches the receiving at a switch (see note 450 in figure 13) of a packet of binary digital signal (sic) including encoded binary digital signals (headers) used to route the packet through a network." Again, the Examiner has unfortunately misconstrued the meaning of the language "encoded binary digital signals used to route the packet through the network" as used throughout the specification and claims of the above-referenced patent application. Again, the excerpted portion of page 10 of the specification, as one example, illustrates how these words were intended to be construed. Therefore, again, the Examiner is incorrect with respect to his assertion regarding what kept Judd teaches. Again, although additional arguments could be made to overcome this rejection by the Examiner, it is believed that the foregoing is sufficient to overcome the Examiner's rejection of the claims based on Judd in view of Huang. Therefore, it is respectfully requested that the Examiner's rejection of these claims on this basis be withdrawn.

As previously indicated, the Examiner has also rejected claims 17 to 27 as being unpatentable over May in view of Huang. Again, this rejection by the Examiner is respectfully traversed.

The Examiner concedes that May fails to teach the specifying upper route without decoding. Nonetheless, the examiner states "Huang teach (sic) a format of headers and routing bits in the packet, which enables the specifying of a rout (sic) without decoding." Again, the Examiner misconstrues Huang, and, Huang fails to teach "encoded binary digital signals specifying of a route through the network without decoding" as that language is used in the specification and claims of the above-

referenced patent application. Specifically, Huang instead describes a Sagnas optical signal switching node. However, on page 3, lines 4-5, of the above-referenced patent application it states "to send these signal serially it is desirable to encode the bit stream so that at least a selected number and a selected frequency of bit transitions occur in the bit stream." Encoding is further described on page 9 of the above-referenced patent application. It is clear that the optical signal switching node of Huang bears no relation to the type of encoding referred to in the specification and claims of the above-referenced application. Therefore, again, because Huang fails to teach what the Examiner has asserted, although additional arguments may be made to overcome the rejection of these claims by the Examiner, it is believed that the foregoing is sufficient to overcome the Examiner's rejection. Therefore, it is respectfully requested that the examiners rejection as to these claims on this basis be withdrawn.

CONCLUSION

In view of the foregoing, it is respectfully asserted that all claims pending in this patent application are in condition for allowance. If the Examiner has any questions, he is invited to contact the undersigned at (503) 264-0967. Reconsideration of this patent application and early allowance of all the claims is respectfully requested.

Respectfully submitted,

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